b.) Amendment to the Specification

Please amend the paragraph at page 1, lines 8-15 to read as follows.

The present invention relates to a retroreflective article such as a triangular-pyramidal cube-corner retroreflective sheeting having a new structure. More particularly, the present invention relates to a retroreflective article such as a cube-corner retroreflective ~~article~~ sheeting in which triangular-pyramidal cube-corner reflective elements having a new structure (hereafter referred to as triangular-pyramidal reflective elements or simply referred to as reflective elements) are arranged in a closest-packed state by sharing their base line.

Please amend the paragraph starting at page 1, line 25 and ending at page 2, line 4 to read as follows.

More particularly, the present invention relates to a retroreflective article formed of many triangular-pyramidal cube-corner retroreflective-element pairs formed of parallel V-shaped groove groups (x, x, x.., y, y, y,.., and z, z, z...) from three directions such as x direction, y direction, and z direction and set on a common plane (S-S'), characterized in that one-side groove angle (GLx, GRx, GLy, GRy, GLz, or GRz) formed between a cross line between plane vertical to the common plane (S-S') and a V-groove vertical ~~plane (Svx, Svy, or Svz) which includes the base line of a V-shaped groove and perpendicular to said the common plane (S-S'), and reflective lateral face (a1, b1, c1, a2, b2, or c2),~~ a plane vertical to the common plane (S-S') and also to a V-groove vertical plane (Svx, Svy, or Svz) which is vertical to the common plane (S-S') and contains the base line of the V-shaped groove, and a reflective lateral face (a1, b1, c1, a2, b2, or c2)

containing the base line of the V-shaped groove intersect, and the V-groove vertical plane does not form a constant angle in the reflective lateral face but the reflective lateral face forms a curved and/or multiple surface.

Please amend the paragraph starting at page 4, line 31 and ending at page 5, line 7 to read as follows.

For example, US Patent No. 2,310,790 of Jungersen describes ~~that~~ setting retroreflective elements having various shapes ~~are set~~ on a thin sheeting. In the case of triangular-pyramidal reflective elements shown in this US Patent, a triangular-pyramidal reflective element whose apex is located at the center of a bottom-plane triangle, whose optical axis is not tilted and whose bottom shape is an equilateral triangle and a triangular-pyramidal reflective element whose apex position is not located at the center of the bottom-plane triangle and whose bottom-plane shape is isosceles triangular are shown and it is described that light is efficiently reflected on an approaching vehicle (improvement of incident angularity).

Please amend the paragraph at page 7, lines 1-7 to read as follows.

European Patent No. 548,280B1 corresponding to the above patent describes ~~that a side common to two paired elements is included, the distance between a plane vertical to a common plane and the apex of an element is not equal to the distance between a point where the optical axis of an element intersects with the common plane and the vertical plane, the tilt angle ranges between 2 and 5°,~~ the tilt is such that for each elements in the pair of elements the distance between its apex and a plane which contains

the common side of the pair of element and is perpendicular to the base plane, is not equal to the distance between said plane and the point of intersection between the optical axis and the base plane, the tilt angle ranging between about 2 and 5°, and the size of an element ranges between 25 and 100 μm.

Please amend the paragraph at page 9, lines 2-17 to read as follows.

As described above, conventionally-known triangular-pyramidal cube-corner retroreflective elements of ~~US Patent No. 2,481,757~~ US Patent No. 2,310,790 of Jungersen, US Patent No. 3,712,706 of Stamm, European Patent No. 137,736B1 of Hoopman, US Patent No. 5,138,488 and European Patent No. 548,280B1 of Szczech are common as shown in Fig. 6 in that bottom planes of many triangular-pyramidal reflective elements respectively serving as the nucleus of incidence and reflection of light are present on the same plane, a pair of faced elements forms a similar figure, and heights of the elements are equal, a retroreflective sheeting constituted of triangular-pyramidal reflective elements whose bottom planes are present on the same plane and retroreflective article are inferior in incident angularity, that is, they respectively have a disadvantage that the retroreflective performance is suddenly decreased when the incident angle of light to the triangular-pyramidal reflective element is increased.

Please add the following new paragraph at page 16, after line 20 and before line 21.

Fig. 24 is a plan view of an assembly of the retroreflective element groups according to the first embodiment of the present invention.

Please amend the paragraph starting at page 20, line 28 and ending at page 21, line 5 to read as follows.

In a tilt element in which the tilt angle of an optical axis is plus or minus, an element whose optical axis tilts so that (q-p) becomes plus is referred to as a plus tilt element when assuming the distance between a point (P1) where a vertical line extended from an apex H1 intersects with the common plane (S-') and the middle point (O) of a common base line (A-B) as p and the distance between a point (Q1) where an optical axis intersects with the common plane (S-S') intersect and the middle point (O) as q and an element whose optical axis tilts so that (q-p) becomes minus is referred to as a minus tilt element as shown in Fig. 5. Moreover, in the case of a normal element whose optical axis does not tilt, the point P1 and the point Q1 are present at the same position and (q-p) is zero (see Fig. 11(b)).

Please amend the paragraph at page 21, lines 13-25 to read as follows.

In Fig. 6, the bottom portion of the x-directional V-shaped groove coincides with α-axis direction and the V-groove vertical plane (Ux) ~~includes~~ contains the base line (A-B) ~~present~~ on the α axis and is a plane vertical to the common plane (S-S'). A plane for defining a one-side groove angle which vertically intersects with the base line is a plane including ~~a point~~ points O-H-C at a point O and a plane including ~~a point~~ points L-K-J at a point L. Moreover, as shown in Fig. 6, in the case of the one-side groove angle of a V-shaped groove for forming an element, the one-side groove angle (shown by ~~∠γOH~~ ∠γOH in Fig. 6) and the one-side groove angle (shown by ~~∠γLK~~ ∠γLK in Fig. 6) are equal.

~~Also, y-directional and z-directional V-shaped grooves similarly include base lines (B-C and A-C) and V-groove vertical planes (Uy and Uz) are defined as planes vertical to the common plane (S-S')~~ Also, in y-directional and z-directional V-shaped grooves, similarly V-groove vertical planes (Uy and Uz) are defined as the planes which contain base lines (B-C and A-C) and are vertical to the common plane (S-S').

Please amend the paragraph at page 22, lines 13-20 to read as follows.

Fig. 10 shows a method for forming ~~a V-shaped groove~~ V-shaped grooves used to form a retroreflective article formed of many triangular-pyramidal cube-corner retroreflective element pairs characterized in that ~~a line is included which is formed when a plane vertical to the common plane (S-S') and a V-groove vertical plane (Svx, Svy, or Svz) vertical to the common plane (S-S') and including the base line of a V-shaped groove and a reflective lateral face (a1, b1, c1, a2, b2, or c2) including the base line of the V-shaped groove intersect each other.~~ one-side groove angle (GLx, GRx, GLy, GRy, GLz, or GRz) formed between a cross line between a plane vertical to the common plane (S-S') and also to a V-groove vertical plane (Svx, Svy, or Svz) which is vertical to the common plane (S-S') and contains the base line of the V-shaped groove, and a reflective lateral face (a1, b1, c1, a2, b2, or c2) containing the base line of the V-shaped groove, and the V-groove vertical plane does not form a constant angle in the reflective lateral face but the reflective lateral face forms a curved and/or multiple surface.

Please amend the paragraph at page 25, lines 10-23 to read as follows.

Fig. 12 shows a cubic diagram of a triangular-pyramidal cube-corner retroreflective element of the present invention. Two reflective lateral ~~faces plane~~ faces, plane a (A-C-H) and plane b (B-C-H) are present on a bottom plane (A-B-C) ~~decided~~ defined by three base lines (A-B, B-C, and C-A) present in the common plane (S-S') and these two reflective lateral faces are ~~planes and formed so as to be~~ plane and are vertical to each other. Moreover, the remaining reflective lateral ~~face plane c~~ face, plane c (A-B-H) for forming an element is also present on the upper side of the common plane. In the case of a groove whose cross section is V-shaped for forming the plane c ~~is V-shaped, a one-side groove angle at the point O of the base line A-B (shown by $\angle\gamma$OH in Fig. 12) is not equal to the one-side groove angle (shown by $\angle\gamma$LK') at an optional point L and is continuously changed over the base line A-B. Therefore, the reflective lateral face plane c (A-B-H) becomes a curved surface.~~ a one-side groove angle (shown by $\angle\gamma$OH in Fig. 12) at the point O on the base line A-B is not equal to the one-side groove angle (shown by $\angle\gamma$LK' in Fig. 12) at an optional point L and the angle continuously changes over the base line A-B. Therefore, the reflective lateral face, plane c (A-B-H), becomes a curved surface.

Please amend the paragraph at page 29, lines 2-8 to read as follows.

Specific embodiments and advantages of such a retroreflective element in which the depth of the plane (Sx, Sy, or Sz) formed of base line group of at least one-directional V-shaped groove group is different from the depth of other planes are described

in detail in International Publication Nos. WO98/18028, WO00/52503, and WO99/54760 ~~by the inventor et al. of the present invention,~~ which are to be referred to for further particulars.

Please amend the paragraph at page 30, lines 3-9 to read as follows.

Specific embodiments and advantages on a retroreflective element in which triangular-pyramidal cube-corner retroreflective element pairs are asymmetric pairs are described in detail in Japanese Patent Laid-Open No. 2001-264525 ~~by the present inventor et al. and US Patent No. 6,318,866 corresponding to the Japanese Patent Laid-Open No. 2001-264525,~~ and corresponding U.S. Patent No. 6,318,866 which are to be referred to for further particulars.

Please amend the paragraph at page 46, lines 8-14 to read as follows.

A specific embodiments and advantages of such a retroreflective element in which the depth of a plane (Sx, Sy, or Sz) formed of a reflective lateral face group of at least one-directional V-shape groove group is different from the depth of other planes are described in detail in International Publication Nos. WO98/18028, WO00/52503, and WO99/54760 ~~by the present inventor et al.~~ which are to be referred to for further particulars.

Please add the following new paragraphs at page 46, after line 16 and before line 17.

Fig. 24 shows a plan view of an assembly of many triangular-pyramidal cube-corner retroreflective element pairs, according to another embodiment of the present invention.

These retroreflective element pairs are formed by parallel V-shaped groove groups (x,x,x.... y,y,y.... z,z,z....) running in three directions of x, y and z. The x-directional V-shaped grooves do not pass through the intersects of y- and z-directional V-shaped grooves but are formed each at a position having an offset from the straight lines connecting the intersects.

In this embodiment the reflective lateral faces along the x-direction only do not have plane surfaces and those along the y- and z-directions have plane reflective lateral faces. Whereas, it is also permissible to do so form the grooves that in none of the three directions the reflective lateral faces formed by the V-shaped groove groups are plane.

Please amend the paragraph starting at page 46, line 30 and ending at page 47, line 1 to read as follows.

A specific embodiments and advantages of the retroreflective element in which the retroreflective element pair is an asymmetric pair are described in detail in Japanese Patent Laid-Open No. 2001-264525 ~~by the inventor et al. of the present invention and US Patent No. 6,318,866 which corresponds to Japanese Paten Laid-Open No. 2001-264525,~~ corresponding U.S. Patent No. 6,318,866 which are to be referred to for further particulars.

Please amend the paragraph at page 51, lines 4-13 to read as follows.

Retroreflective coefficients of examples and described in this specification are measured by the method described below. As a retroreflective-coefficient measuring instrument, "Model 920" made by GAMMA SCIENTIFIC is used. The retroreflective coefficient of a retroreflective article of 100 mm × 100 mm is properly measured on five places of the article under angular conditions of observation angles of ~~0.2° and 1.0° and~~ 0.2°, 0.5° and 1.0° and incident angles of 5°, 10°, and 30° in accordance with ASTM E810-91 and the average value of five measured values is assumed as the retroreflective coefficient of the retroreflective article.

Please amend the paragraph at page 58, lines 2-4 to read as follows.

Retroreflective coefficients of the above Articles 6 to 10 of the present inventions and Comparative Article 2 are measured and the following values in ~~Table 2~~ Table 4 are obtained.